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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,996	09/19/2005	Joji Fujiwara	MAT-8744US	1009
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,996	Applicant(s) FUJIWARA ET AL.	
	Examiner LATANYA CRAWFORD	Art Unit 2813	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/23/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 4, 7 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5, 6, 8 and 10-24 is/are rejected.
- 7) ☐ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the correspondence filed on 12/23/2008.

Currently, claims 1-3, 5-6, 8, 10-24 are pending. Claims 4, 7, & 9 are cancelled.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 17, 20, & 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Asahi (US Pub no. 2003/0090883 A1).

Regarding claim 17, Asahi et al. discloses a method for manufacturing a module component having a plurality of circuit blocks shielded individually, the method comprising: a step of providing a composition of resin and an electrically conductive material [0054]; a step of mounting a partition (203) made of said composition higher than mounting components (204), the partition dividing the mounting components and a substrate into a plurality of circuit blocks on the substrate (211) [0054-0055]; a step of forming a first sealing member (201-left) covering a first circuit block of the plurality of circuit blocks individually in such a manner as to be higher than the mounting components fig. 2b/fig. 2c; a step of forming a second sealing member (201-right) covering a second circuit block of the plurality of circuit blocks individually in such a manner as to be higher than the mounting components; a step of forming a first conductive film (202-left) on a surface of the first sealing member; and a step of forming a second conductive film (202-right) on a surface of the second sealing member [0056].

Art Unit: 2813

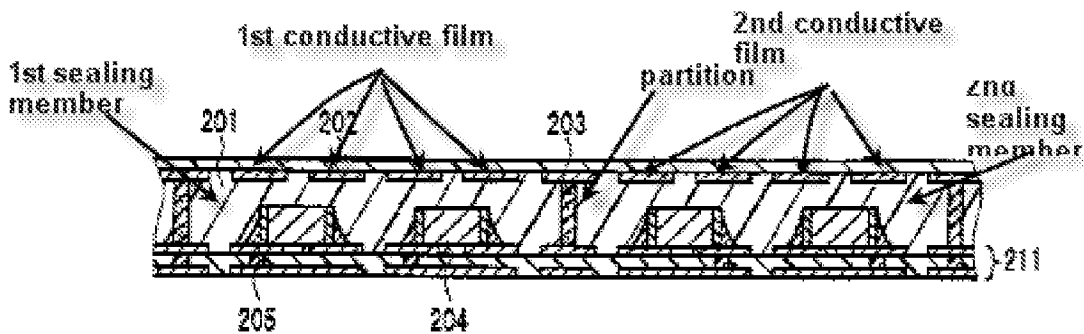


FIG. 20

Regarding claim 20, Asahi et al. discloses the step of forming a first conductive film or the step of forming a second conductive film (302 left/ 302 right) includes a step of connecting the respective conductive film with a ground pattern [0089] fig. 11.

Regarding claim 24, Asahi et al. discloses the first conductive film and the second conductive film (202 -left/ 202- right) are formed with ends which face the partition and which are separated by the partition (203) fig. 2c.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

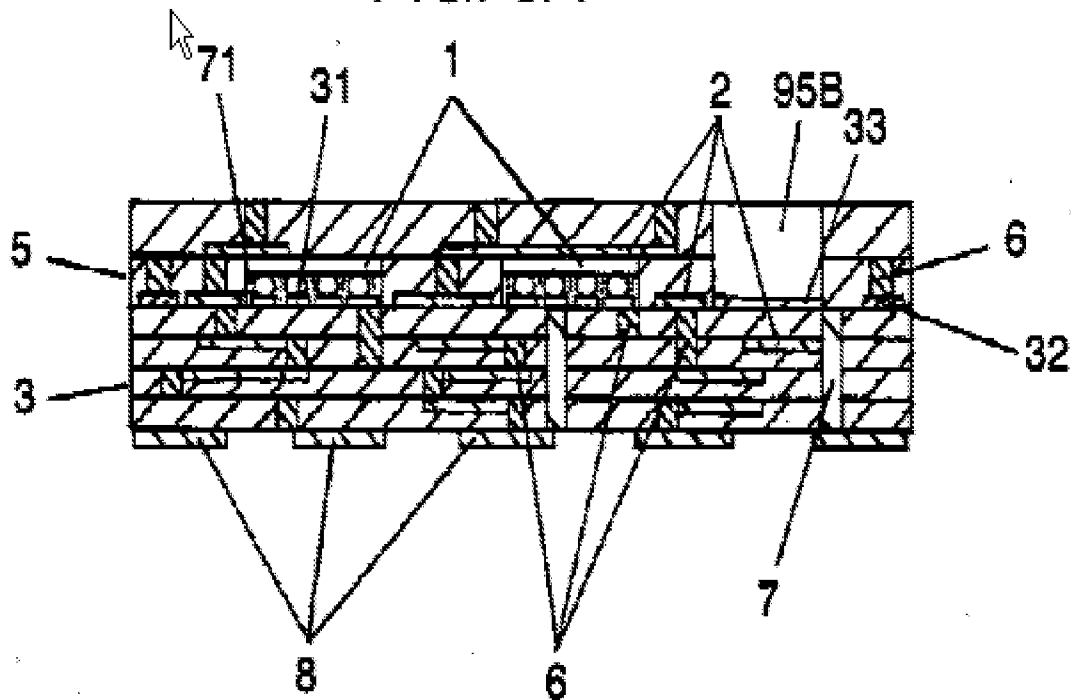
A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 8, 10-12, 14, 16, & 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Higashitani (US Pub no. 20050017740 A1).

Art Unit: 2813

Regarding claim 1, Higashitani et al. discloses a module component comprising:
 a substrate a partition (6) formed on the substrate (3), the partition having a
 predetermined height to divide the substrate into a plurality of circuit blocks;

FIG. 6A

a first sealing member (5- between partitions 6 on the left) covering a first circuit block of the plurality of circuit blocks; a second sealing member (5- between partitions 6 on the right) covering a second circuit block of the plurality of circuit blocks; a first conductive film (circuit pattern/left -2) covering at least a surface of the first sealing member(5- between partitions 6 on the left); and a second conductive film (circuit pattern/right -2) covering at least a surface of the second sealing member(5- between

Art Unit: 2813

partitions 6 on the right); wherein the plurality of circuit blocks are electrically shielded individually and the partition is made of a composition of a resin and an electrically conductive material [0039][0043].

Regarding claim 8, Higashitani et al. discloses the partition (6) has a conductive wall in a direction vertical to the substrate (3) fig. 6a.

Regarding claim 10, Higashitani et al. discloses wherein the partition (6) has resin (5) at least one side surface thereof fig. 6a.

Regarding claim 11, Higashitani et al. discloses the partition (6) is positioned inside the substrate (3), and has a planar shape of one of a circle and a polygon fig. 2.

Regarding claim 12, Higashitani et al. discloses the partition (6) is positioned out of contact with an outer edge of the substrate fig. 2.

Regarding claim 14, Higashitani et al. discloses the first conductive film (circuit pattern/left -2) and the second conductive film (circuit pattern/right -2) include metal [0045].

Regarding claim 16, Higashitani et al. discloses the substrate (3) has a ground pattern on a surface thereof, and the ground pattern is connected with the first conductive film and the second conductive film [0068] fig. 16B.

Regarding claim 22, Higashitani et al. discloses the partition (6) electrically connects the first conductive film (circuit pattern/left -2) with the second conductive film (circuit pattern/right -2) fig. 2.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 5, & 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higashitani (US Pub no. 20050017740 A1) in view of Glenn (US Pub no. 2002/0168798 A1).

Regarding claim 2, Higashitani et al. discloses all the claim limitations of claim 1 and further teaches the substrate is made of resin (3) [0033]; the first sealing member (5- between partitions 6 on the left), the second sealing member (5- between partitions 6 on the right) and the partition (6) fig. 6a but fails to teach the sealing member and partition contain the same resin.

However, Glenn et al. teaches the sealing member (42) and partition (150) contain the same resin [0089-0090]. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the first sealing member, the second sealing member and the partition of Higashitani et al. with the same resin as taught by Glenn et al. such that the first sealing member, the second sealing member and the partition contain the same material since doing so avoids mismatch in thermal coefficient.

Regarding claim 5, Higashitani et al. discloses the conductive material (6) of the partition is a conductive resin [0043].

Regarding claim 15, Glenn et al. discloses the partition (150) is higher than an electric component (30) mounted on the substrate [0089-0091].

7. Claims 6 & 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higashitani (US Pub no. 20050017740 A1) in view of Yean (US Pub no. 2004/0178495 A1).

Regarding claim 6, Higashitani et al. discloses all the claim limitations of claim 1 but fails to teach the partition is resin having a metal film formed on an outer surface thereof, and has a square cross section in a longitudinal direction.

However, Yean et al. teaches the partition (165) is resin [0029] having a metal film (164a) formed on an outer surface thereof [0026] except for having a square cross section in a longitudinal direction. The partition having a square cross section in a longitudinal direction is a matter of design choice where a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the partition was significant. In re Dailey 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Regarding claim 13, Yean et al. discloses wherein the partition (164a/165) has a planar shape of a letter T fig. 1d.

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Asahi (US Pub no. 2003/0090883 A1) in view of Yean (US Pub no. 2004/0178495 A1).

Regarding claim 18, Asahi et al. discloses all the claim limitations of claim 17 but fails to teach wherein the partition contains a conductive material formed in a direction vertical to the substrate, and the step of forming a first sealing member.

However, Yean et al. discloses the partition contains a conductive material (164a) formed in a direction vertical to the substrate (104), and the step of forming a first sealing member (130) [0024] [0026] fig. 1C. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Asahi et al. with the partition containing a conductive material formed in a direction vertical to the substrate, and the step of forming a first sealing member as taught by Yean et al. since doing so would provide pass through circuitry.

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Asahi (US Pub no. 2003/0090883 A1) in view of Ohmi (US Pub no. 2006/0158865 A1).

Regarding claim 19, Asahi et al. discloses all the claim limitations of claim 17 but and further teaches a step of removing the conductive material (202) formed in a top of the partition (203) by etching [0052] but fails to teach by one of dicing and laser.

However, Ohmi et al. teaches by laser [0152]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the etching process of Asahi et al. with removal by laser as taught by Ohmi et al. since patterning conductive material by laser is conventionally known in semiconductor fabrication.

Art Unit: 2813

10. Claims 21 & 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higashitani (US Pub no. 20050017740 A1) in view of Asahi (US Pub no. 2003/0090883 A1).

Regarding claim 21, Higashitani et al. discloses all the claim limitations of claim 1 but fails to teach wherein the first and second conductive films are separated by the partition.

However, Asahi et al. teaches the first and second conductive films (202-left/ 202-right) are separated by the partition (203).

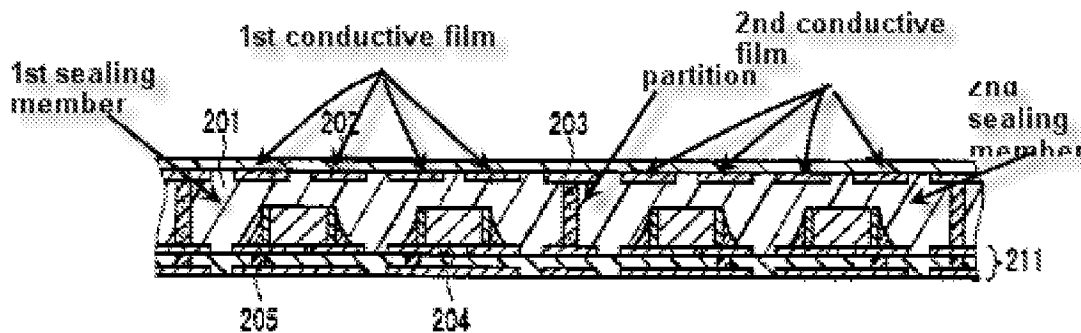


FIG. 20

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Higashitani et al. with the first and second conductive films are separated by the partition as taught by Asahi et al. since doing so enhances module properties.

Regarding claim 23, Asahi et al. discloses the first conductive film and the second conductive film have ends which face the partition and which are separated by the partition (203) (view fig. 2C).

Allowable Subject Matter

11. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The limitations of: the composition is made of ceramic powder-containing resin and conductive material; in combination with wherein the substrate is ceramic; and the first sealing member, the second sealing member and the partition contain a same resin was not found in prior art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LATANYA CRAWFORD whose telephone number is (571)270-3208. The examiner can normally be reached on Monday-Friday 7:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith can be reached on (571)-272-1907. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2813

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LaTanya Crawford/
Examiner, Art Unit 2813

/W. David Coleman/
Primary Examiner, Art Unit 2823